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Original Code Sequence

```
ld      r1, y
add     r5 < r1, 4
shl     r5, 1
or      r6 < r1, r5
```

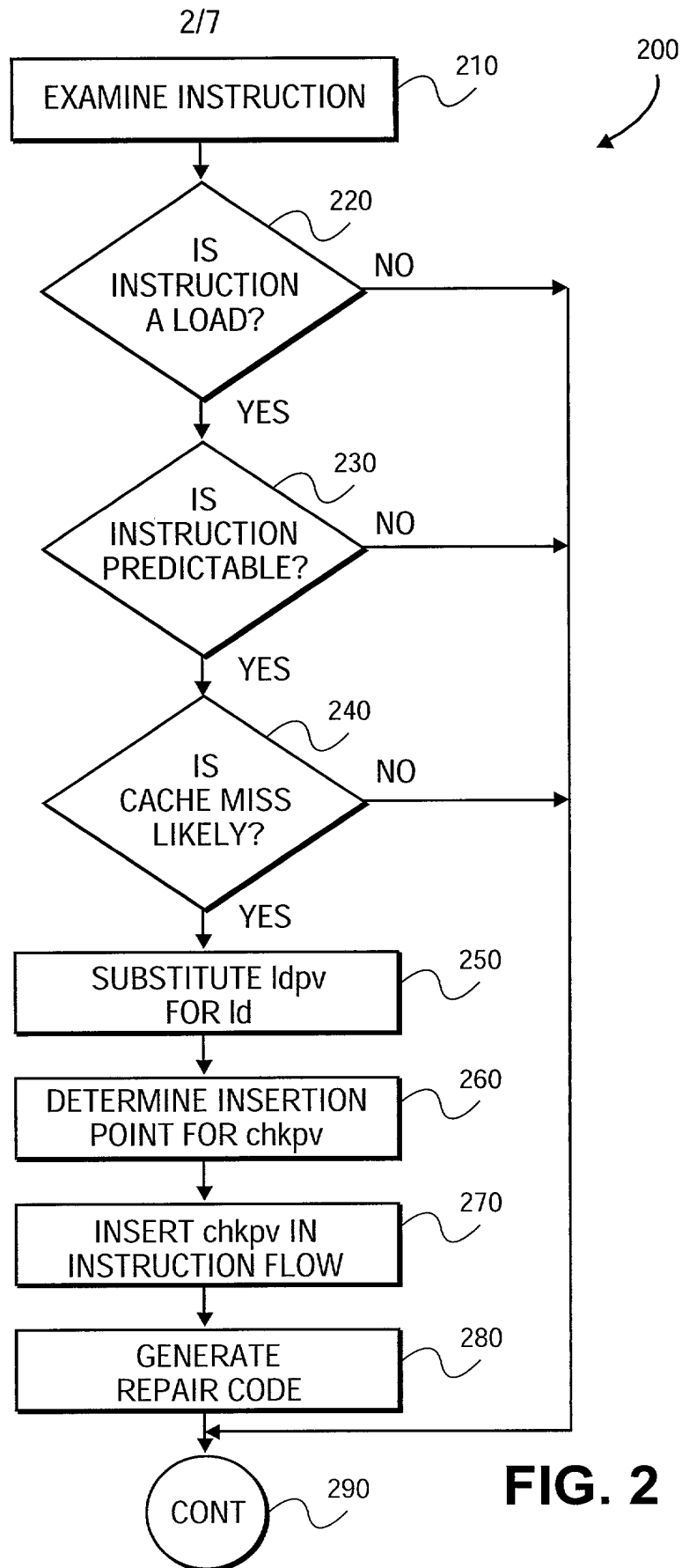
Modified Code Sequence

```
ldpv    r1, y
add     r5 < r1, 4
shl     r5, 1
or      r6 < r1, r5
.
.
chkpv   r1, y, REPAIR
```

REPAIR:

```
ld      r1, y
add     r5 < r1, 4
shl     r5, 1
or      r6 < r1, r5
ret
```

**FIG. 1**



**FIG. 2**

300

| ID | ADDRESS | VALIDITY | REGISTER NO. | SIZE | PREDICTED VALUE | ACTUAL VALUE | AVV |
|----|---------|----------|--------------|------|-----------------|--------------|-----|
|    |         |          |              |      |                 |              |     |
|    |         |          |              |      |                 |              |     |
|    |         |          |              |      |                 |              |     |
|    |         |          |              |      |                 |              |     |

FIG. 3

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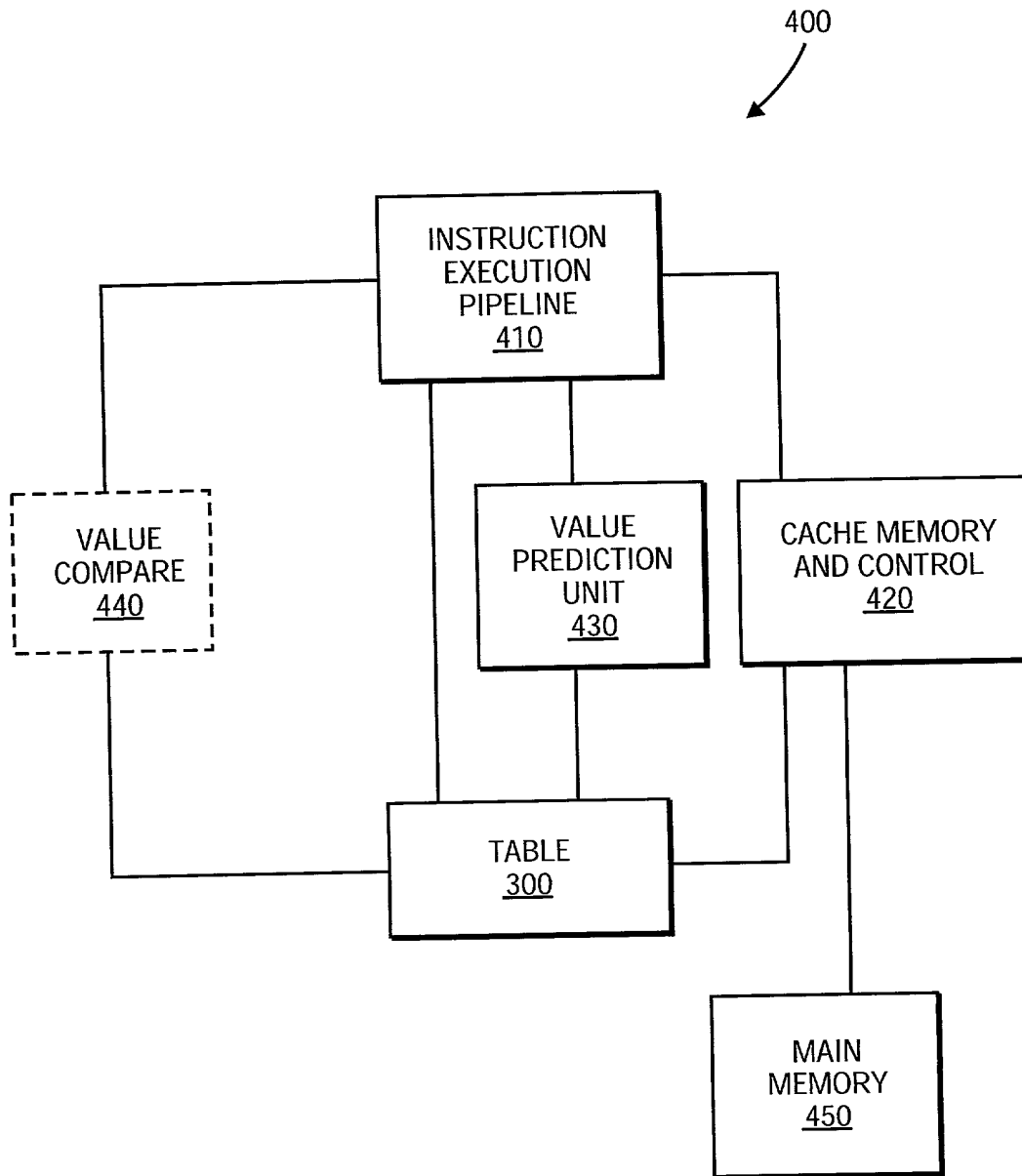
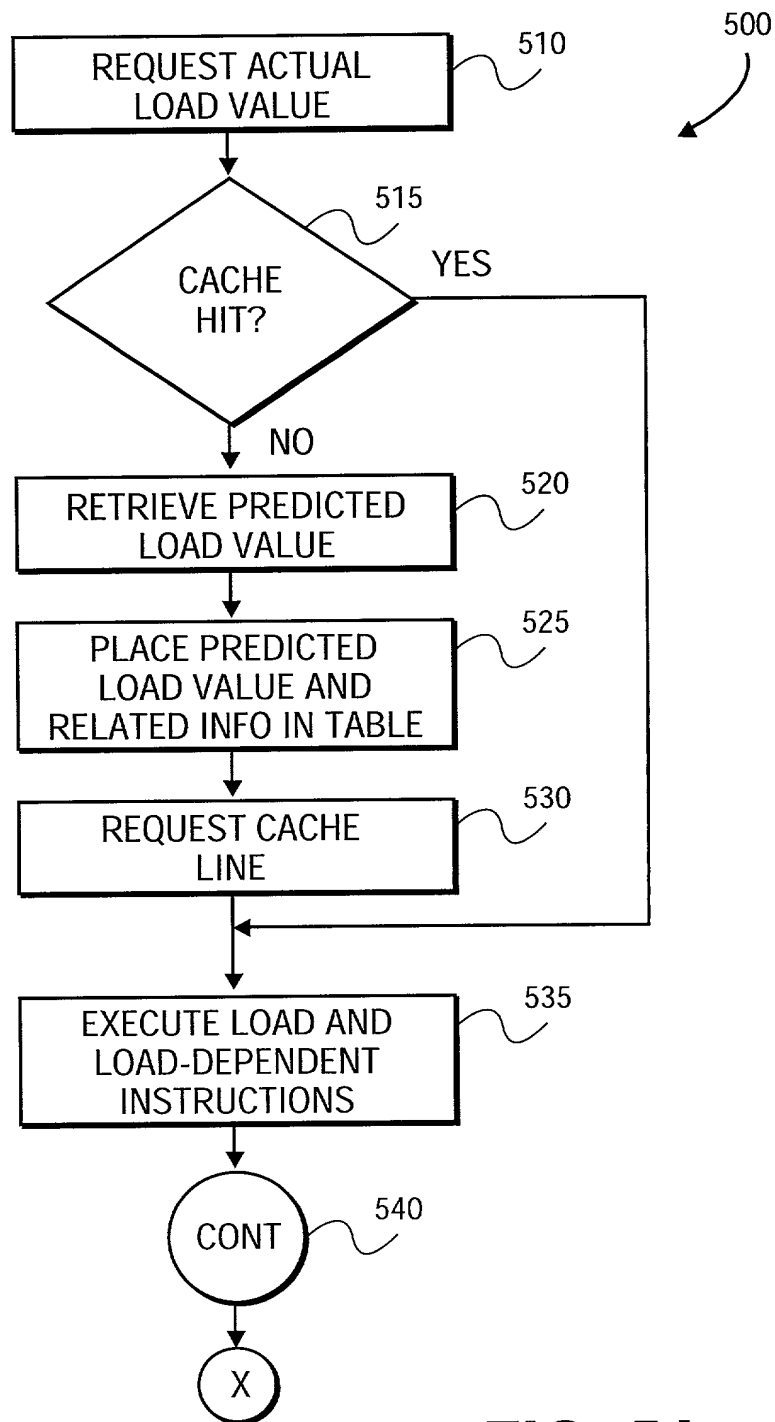
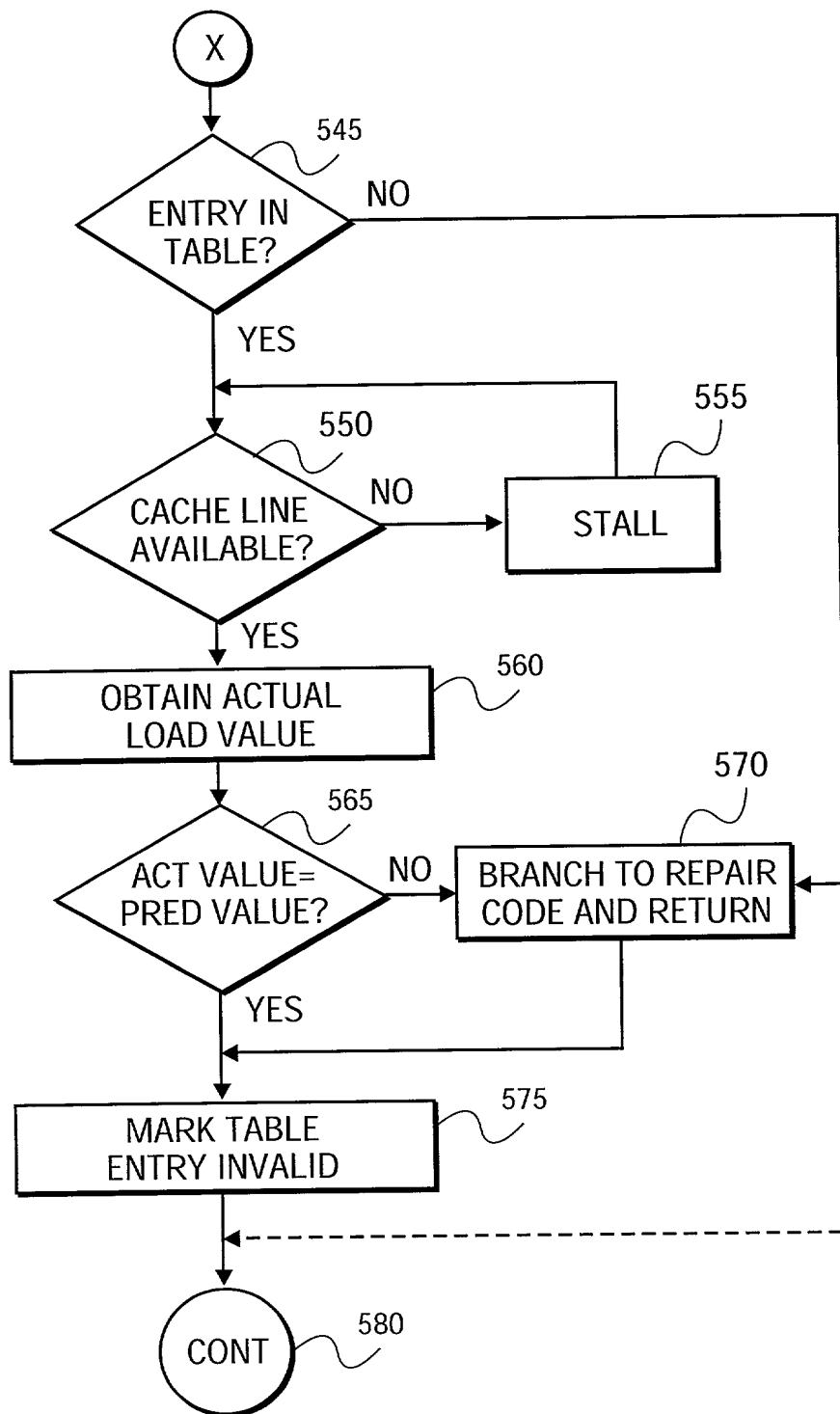


FIG. 4

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**FIG. 5A**



**FIG. 5B**

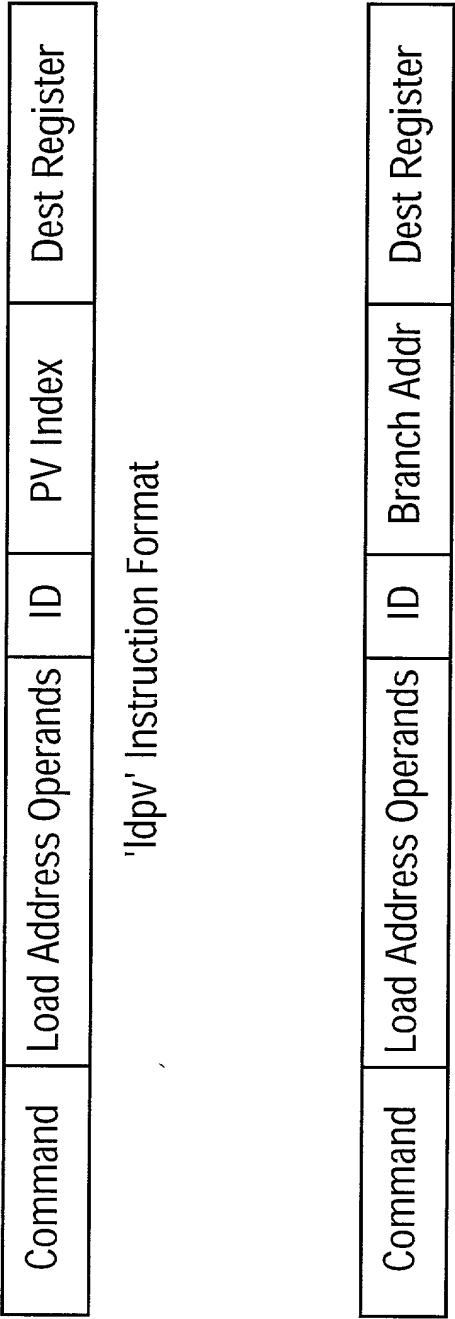


FIG. 6